



Fact Sheet

West Coast Chinook Salmon

September 1999



Background: The National Marine Fisheries Service (NMFS) has completed its comprehensive scientific review of chinook salmon on the entire West Coast. Coast-wide, there are 17 distinct groups, or Evolutionarily Significant Units (ESUs), of chinook salmon, from southern California to the Canadian border and east to the Rocky Mountains. This review resulted in proposed listings in March 1998 of seven chinook ESUs. Four of those ESUs were listed in March 1999. The others were deferred for six months to resolve areas of scientific disagreement. The Fisheries Service has now made final listing determinations for the deferred ESUs. Some warranted splitting into smaller groupings, and others were at less risk than previously thought.

Specifically, NMFS finds that:

- * California's Central Valley spring-run ESU is a threatened species instead of endangered, as originally proposed.
- * The Central Valley fall and late fall-run ESU is more robust than previously thought, and does not warrant a threatened status as originally proposed. However, NMFS will consider the ESU a candidate species and continue to monitor its status.
- * The California Coastal ESU and Southern Oregon and Northern California Coastal ESU are separate ESUs. They were originally combined into a single Southern Oregon and California Coastal ESU. Only the California Coastal ESU warrants listing under the ESA.
- * The Deschutes River summer/fall-run ESU is separate from the listed Snake River fall-run ESU. It does not warrant ESA protection at this time.

Special Features: Chinook are easily the largest of any salmon, with adults often exceeding 40 pounds; individuals over 120 pounds have been reported. They are prized by commercial, sport, and tribal fishermen alike. Chinook use a variety of freshwater habitats, but it is more common to see them spawn in larger mainstem rivers than other salmon species.

Scientific Findings:

1. Central Valley Spring-run ESU = Threatened

- * Currently exist in small portion of previous range; 70-90 percent of spawning and rearing habitats have been lost.
- * Average recent (5 year) abundance is 8,500 fish, compared with 40,000 fish in 1940s.
- * Potential hybridization between spring- and fall-run fish in hatchery and mainstem Sacramento River, with significant straying by hatchery fish because of off-site releases.

2. Central Valley Fall and Late Fall-run ESU = Listing Not Warranted, Candidate Species

- * Average recent (5 year) escapement above 190,000 fish from natural production; however 20-40 percent of these natural spawners are of hatchery origin.

- * Long-term trends generally stable or increasing, but unclear if natural populations are self-sustaining because of high hatchery production.

- * Short-term trends for San Joaquin River tributaries are stable or increasing.

- * Concerns remain over impacts from high hatchery production and harvest levels, although ocean and freshwater harvest rates have been recently reduced.

- * 40-50 percent of spawning and rearing habitats have been lost or degraded.

3. Southern Oregon & Northern California Coastal ESU = Listing Not Warranted

- * New information supports separating this ESU from populations in the California Coastal ESU (instead of as combined as originally proposed).

- * The bulk of chinook production occurs in the Rogue River Basin, where average recent escapements are greater than 51,000 fish.

- * While long-term trends in the ESU are mixed, most short-term trends in abundance of fall chinook are positive in smaller coastal streams in the ESU.

- * Concerns remain over small spring chinook populations and negative trends for spring chinook in the Rogue River (Oregon) and mixed trends for spring-run chinook in the Smith River (California).

4. California Coastal ESU = Threatened

- * New information supports separating this ESU from populations in the Southern Oregon & Northern California Coastal ESU (instead of as combined as originally proposed).

- * Average recent natural escapements are not available for most populations in the California Coastal ESU.

- * Fall chinook salmon occur in relatively low numbers in northern streams and their abundance is sporadic in streams in the southern portion of the geographic region encompassing this ESU; spring-run populations extinct.

- * There are no large hatchery programs within this ESU.

- * Degradation of spawning and rearing habitats, loss of habitat from dams and water withdrawals.

5. Deschutes River Summer/Fall-run ESU = Listing Not Warranted

- * New information supports separating this ESU from populations in the threatened Snake River fall-run ESU (rather than combining them as originally proposed).

- * The Deschutes River population continues to increase. Most recent data shows annual returns to be at a five-year average of about 16,000 fish, increasing at about 18 percent a year.

- * Concerns remain over the possible extinction of the summer-run life history type in the Deschutes Basin, and the loss of fall-run fish from adjacent river basins (Umatilla, John Day, Walla Walla) that may have shared a common ESU with Deschutes chinook.

What's Next? The listings will become effective in 60 days. While some federal rules will go into effect for the threatened ESUs as well, they will affect only activities on federal lands or projects that require a federal permit. On non-federal lands, other so-called "4(d) rules" (protective regulations) will be proposed later for the threatened ESUs. They will be tailored to mesh with efforts already underway by state, tribal and local conservation initiatives.

Get more information on these listings by visiting the National Marine Fisheries Service's Website at www.nwr.noaa.gov; or by contacting Craig Wingert, NMFS Protected Resources Division, 501 West Ocean Blvd., Suite 4200, Long Beach, CA, 90802 (562/980-4021); or Garth Griffin, NMFS Protected Resources Division, 525 NE Oregon St., Suite 500, Portland, OR, 97232 (503/230-5400).